

# **Brinsea**

**TLC-4**

**T**hermal

**L**ife-support

**C**abinet

## **Users instructions**

### **For Brooding Birds and other Altricial Species**

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## **IMPORTANT NOTICE**

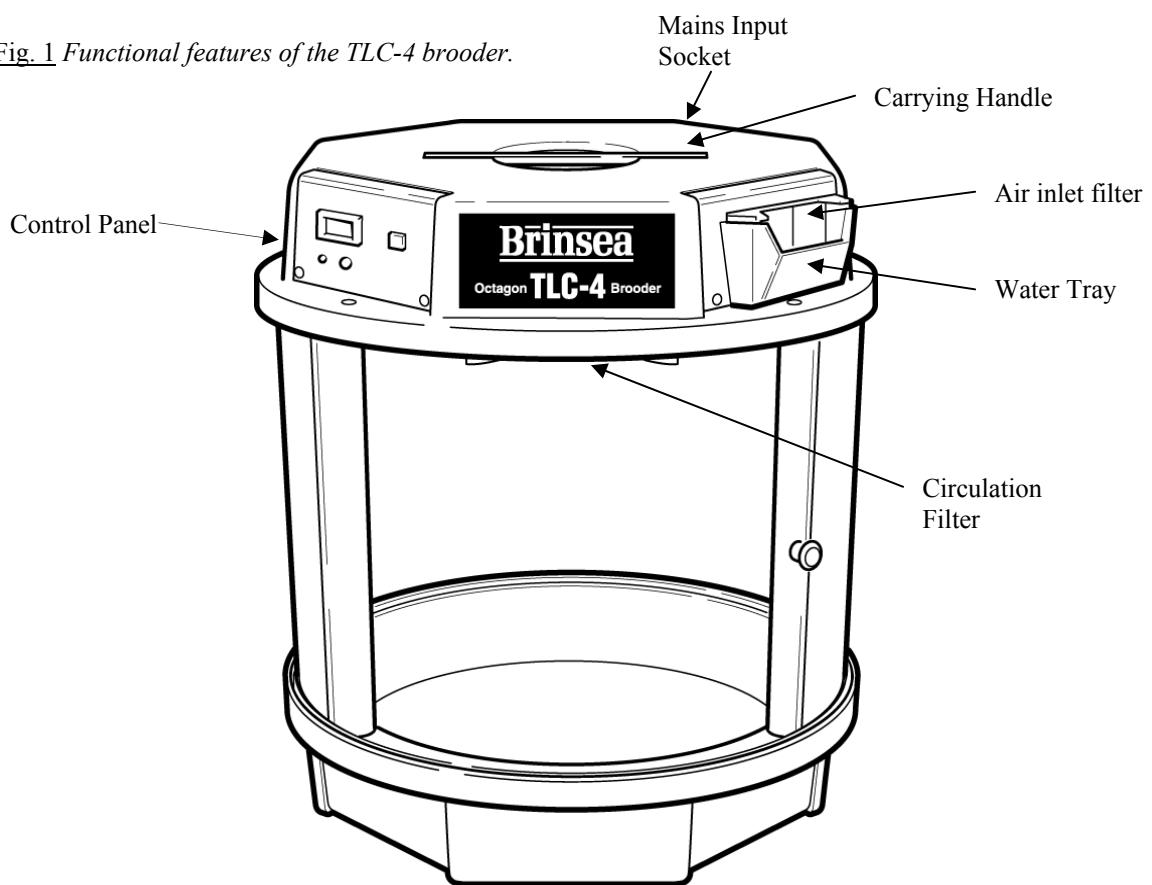
Brinsea Products Ltd and its agents or distributors will not be responsible for loss of animals in the event of failure however caused and the user is advised to arrange his own insurance cover where loss of power or mechanical or electrical failure might result in unacceptable losses. It is not recommended that animals of significant value be housed in this product unless it is used in conjunction with an independent temperature alarm system. Such systems are available from Brinsea Products Ltd.

## 1.0 Introduction

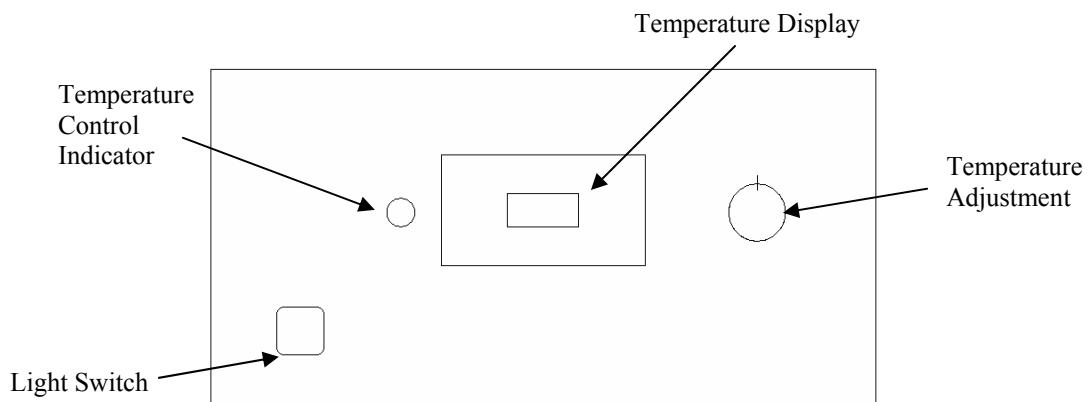
These instructions detail the operation of your new Octagon TLC-4 brooder. Please read them carefully before setting up your unit to achieve best results and keep these instructions safe for future reference. Your TLC-4 brooder is designed to allow the user to vary the environmental conditions to suit a wide range of species and the specific set-up for every species is beyond the scope of these instructions. There are a range of books and veterinarian texts available covering animal and avian hand rearing and recovery techniques.

The principle applications for the TLC-4 are as an advanced brooder for altricial hatchlings. Care must be taken to ensure adult birds do not cause damage to the brooder interior, particularly interference with the filter or components above the filter. Damage to these parts could cause injury or death to a bird.

*Fig. 1 Functional features of the TLC-4 brooder.*



*Control Panel Features:-*



## 2.0 Unpacking

Your TLC-4 brooder has been supplied in protective packaging. Please remove all tape, strapping and packing. Retain the carton and packing materials to enable the unit to be repacked.

The Octagon TLC-4 will include:

<u>Quantity</u>	<u>Item</u>
1	Octagon TLC-4 brooder (with filters fitted)
4	White plastic nest tubs
1	Guarantee Card
1	Mains Lead

- 2.2 Check that the electrical supply matches the machine's requirements (marked on the technical label on the rear of the TLC-4). UK machines are fitted with a 3 Amp fuse in the mains plug – if replaced always use this rating.
- 2.3 Complete and return your guarantee card to register for your free 2 year guarantee.
- 2.4 Go to [www.Brinsea.co.uk](http://www.Brinsea.co.uk) and register as a free member of the Brinsea e-mail group to receive the latest news and information such as advance notice about new products, special offers, exclusive competitions and much more.

## 3.0 Location and Installation

Your TLC-4 will give best results in a room free from wide temperature variations and with generous ventilation – particularly important if several units are in use at the same time. Ensure that the room temperature cannot drop on a cold night. Ideally thermostatically control the room at between 20 and 27°C (68 and 80°F). Never allow the room temperature to drop below 15°C (59°F) and ensure that the TLC-4 cannot be exposed to direct sunlight.

- 3.1 Place the TLC-4 on a flat, level surface (workbench height is ideal) with the door facing forwards. A second TLC-4 can be stacked on top. Ensure that the feet of the upper unit locate in the recesses on the top of the lower TLC-4 and that the door is facing forwards on both machines.
- 3.2 Your TLC-4 is supplied with filter media fitted (see fig.1). For details of filter replacement see servicing section.
- 3.4 Plug the mains lead into the 'Figure 8' socket on the rear of the machine. Connecting the power will start the fan (which runs continuously), the illuminated red LED on the control panel and the digital temperature display will indicate the air temperature within the brooder chamber. See section 4 below on temperature adjustment. Ensure the sliding door is closed before adjusting temperature.
- 3.5 The interior of the TLC-4 can be illuminated to make cleaning or inspection of animals or birds easier by pressing the red button on the control panel.

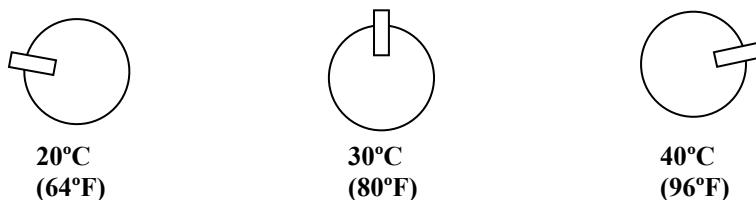
## 4.0 Temperature

Stable and correct temperature is essential for good results. Adjust with care and read the following points and procedures carefully before setting up the brooder.

### WARNING:-

THE CIRCULATING FAN AND THE METABOLIC HEAT FROM BIRDS ALSO CONTRIBUTE. THE BROODER MAY NOT CONTROL PROPERLY IF THE ROOM TEMPERATURE IS LESS THAN 3°C (10°F) LOWER THAN THE BROODER TEMPERATURE REQUIRED.

- 4.1 The internal light contributes heat to the TLC-4 when switched on. If room temperature is high and close to the set temperature the light can cause overheating when left on. **It is recommended that the light is not left on for periods longer than 5 minutes.**
- 4.3 The TLC4 has a thermal cut-out feature as standard. In the unlikely event of the unit overheating the heater will cut-out at approx 45°C immediately, and will not come back on until the unit has cooled to approximately 35°C.
- 4.4 Your TLC-4 is fitted with a high quality, individually calibrated digital thermometer. Be cautious of the accuracy of other thermometers used and have them calibrated if necessary.
- 4.5 After connecting power the TLC-4 warms up and after a period of time the red LED will change from continuously on to flashing. When flashing regularly the TLC-4 is controlling at temperature. Allow at least half an hour for the temperature to fully stabilise throughout the unit before making adjustments to achieve the desired temperature.
- 4.6 To adjust temperatures rotate the knob on the right hand side of the control panel, clockwise to increase temperature, anticlockwise to reduce it. Follow the approximate guide below to achieve desired temperature settings. Always allow half an hour between adjustments for the temperature to stabilise and refer to the digital temperature display to confirm that the desired temperature has been reached.



- 4.7 When reducing temperature the red LED may go out while the TLC-4 cools – this is normal.
- 4.8 **TEMPERATURE GUIDELINES FOR BROODING HATCHLING CHICKS**  
As a general rule a newly hatched chick will need a brooder temperature a little lower than incubation temperature, about 35-36°C (95-97°F) and the temperature can be reduced progressively at about 0.5°C (1°F) per day until it is fully feathered or no longer requires supplementary heat. In warm ambient conditions this will be sooner than in cold climates. When brooding temperatures are just above room temperature the red indicator light may go out (indicating that no heat is being applied). This indicates that the birds are ready to be moved to a nursery cage. If room temperature then drops (e.g. at night) then the birds can be kept warm by replacing them into the TLC-4.
- 4.6 Where there is to be a continuous throughput of birds of differing stages of development, several TLC-4's can be set to different temperatures and the birds moved to cooler units as they grow.

Recommended staged temperature settings for most parrots and falcons:

<u>Days 1 to 5</u>	<u>Days 6 to 10</u>	<u>Days 11 to 15</u>	<u>Days 16 to 25</u>
36°C (97°F)	33°C (91°F)	29.5°C (85°F)	27°C (80°F)

These temperatures have been found to promote optimal health and growth from newly hatched chicks and are a little higher than may be found in nests. Where birds are taken from a nest after more than a few days, the temperature setting will usually need to be a few degrees lower to prevent heat stress. The recommendations above are for guidance only, always observe the chick's behaviour (see below) to verify setting.

*Temperatures too high can cause heat stress, dehydration, deformities or haemorrhaging under the skin. Low temperature may reduce appetite and retard growth. Observation of the bird is the best guide to its comfort. Chicks try to huddle together if cold and move about seeking parental warmth. Chicks too warm separate and pant. In either case they will complain vocally. Comfortable birds will lie quietly sleeping with wings loosely folded at the sides, usually in contact with one another.*

- 4.9 Developing chicks are fairly tolerant of short-term temperature drops but care should be taken about cooling that occurs during feeding or inspection. Keep the room warm, hold the bird in a cloth to prevent chilling from cold hands and use warmed feeding utensils.

## 5.0 Humidity

*Elevated air temperatures in the TLC-4 will reduce the relative humidity level (RH) and can cause dehydration. A water reservoir is fitted to counteract this effect.*

- 5.1 Your TLC-4 brooder is fitted with a water reservoir (see fig.1) which humidifies air as it is drawn into the brooder through the air inlet filter. Use a solution of Brinsea Incubation Disinfectant (1part concentrate to 100 parts water) in the water reservoir to inhibit bacterial build-up. It is recommended that the reservoir is topped up with solution daily to reduce dehydration. This can be a particular problem with chick(s).
- 5.2 To further increase humidity levels within the brooder the water reservoir is fitted with a block of absorbent paper mesh as standard. This block may be cut down in length with a sharp knife or removed entirely to give lower humidity levels. The block can provide a breeding ground for bacteria. In addition to the use of Brinsea Incubation Disinfectant concentrate in the water, it is recommended that the block is replaced every 2 months of use.

## 6.0 Introducing young birds

Once the correct temperature has been established and the air humidified the TLC-4 is ready for use.

- 6.1 For newly hatched chicks use the nest tubs supplied lined with paper towel. Young patients of similar age and size can be placed together and benefit from the warmth and comfort. If disparity in size is too great the smaller animal is at risk of being crushed or smothered.
- 6.2 For larger chicks and adult birds line the base of the TLC-4 with paper towelling and place the patient(s) directly on this. Alternatively, plastic liners are available from Brinsea Products, call 0845 2260120 or visit [www.brinsea.co.uk](http://www.brinsea.co.uk) for more details.

- 6.3 Change paper towel at each feed or at least four times a day.
- 6.4 Follow feeding regimes recommended for your species ensuring the highest standards of hygiene at all times.
- 6.5 In order to maintain maximum air-flow the air-flow filters should be checked once a week for dust or down, and cleaned if necessary.
- 6.6 The TLC-4 can be used as a thermal intensive care unit for mammals or reptiles. In such cases fit the unit with the floor liner accessory (available from Brinsea Products). The unit would normally be set at between 30 and 35°C for chilled or shocked small animals. Brinsea do a medical version of the TLC-4 (the TLC-4M and the larger TLC-5M) which have further medical features for veterinary applications. Contact Brinsea on 0845 2260120 or [www.brinsea.co.uk](http://www.brinsea.co.uk) for details.

## 7.0 Cleaning Up

### **IMPORTANT:**

ALWAYS DISCONNECT THE TLC-4 BROODER FROM THE MAINS POWER SUPPLY DURING CLEANING.

ENSURE THAT ALL ELECTRICAL PARTS ARE KEPT DRY.

- 7.1 Following each brood in your TLC-4 brooder remove all debris from the floor. Wipe all internal surfaces with a soft cloth soaked in 100:1 Brinsea Incubation Disinfectant solution. Filters should be inspected on a weekly basis and be cleaned in necessary. Remove both filters and gently hand wash in warm water then allow to dry before use. Filters need replacing every six months. Immerse and soak the nest tubs in disinfectant solution. The exterior of the TLC-4 may be cleaned with a damp cloth.

USE WATER BASED DISINFECTENTS ONLY WHEN CLEANING

- 7.2 Always clean the TLC-4 brooder before storage and ensure that the unit is totally dry inside and out.
- 7.3 Re-order Brinsea Incubation Disinfectant, filters or evaporating block by phoning 0845 2260120

## 8.0 Servicing

IMPORTANT. THE HEATER IS AT MAINS VOLTAGE. NEVER DRILL INTO OR PUNCTURE THE CURVED SIDES OF THE INCUBATOR. RISK OF ELECTRIC SHOCK.

- 8.1 Replace both filters after every six months of use. Contact Brinsea Products on 0845 2260120 to order.
- 8.2 The interior light bulb can be replaced if necessary. Spares are available from Brinsea Products.

ENSURE THAT THE TLC-4 IS DISCONNECTED FROM THE MAINS SUPPLY.

Remove the twelve screws that retain the ceiling and replace the bulb with 15Watt pygmy BC type. Do not exceed the recommended Wattage.

- 8.3 In case of failure first check that the mains power supply is working and that the mains plug fuse is intact. If the problem persists contact your distributor or Brinsea Products Service Dept.

The functional parts of the TLC-4 are modular and parts are available and are readily exchangeable by a suitably qualified person equipped with basic tools.  
Fitting instructions are supplied with replacement parts.

## 9.0 Upgrading

The TLC 4 can be upgraded to the TLC 4M, which is an advanced intensive care unit for sick animals or birds. This includes medical extras such as a Nebuliser fitting, oxygen supply fitting and temperature alarm input socket. For further details on the product and upgrade call 0845 2260120 or visit [www.brinsea.co.uk](http://www.brinsea.co.uk).

## 10.0 Specification

<b>Construction:</b>	<b>Top and base mouldings:</b> structural, insulated polyurethane  <b>Curved sides:</b> Twin skin ABS  <b>Door opening frames:</b> Anodised extruded aluminium  <b>Clear door:</b> ‘Plexiglass’ or similar scratch resistant clear acrylic
<b>Dimensions:</b>	(External) 475mm high x 450mm diameter (18 ¾" high x 17 ¾" diameter) (Max. Internal) 370mm high x 395mm diameter (14 ½" high x 15 ½" dia.)
<b>Weight:</b>	5.5Kg (12lbs)
<b>Power Consumption:</b>	120 Watts (maximum)  60 Watts (typical average)
<b>Electrical Supply:</b>	230v 50Hz or 115v 60Hz as ordered

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